

IN THE CLAIMS

The current claims follow. For claims not marked as amended in this response, any difference in the claims below and the previous state of the claims is unintentional and in the nature of a typographical error.

1. (Original) For use in a wireless communication system comprising at least two base stations and a mobile station, an apparatus for providing rescue channel communications between said at least two base stations in said wireless communication system, said apparatus comprising:

a rescue base station that is capable of communicating with said mobile station that is capable of providing a rescue channel for said mobile station; and

a source base station that is capable of communicating with said mobile station and with said rescue base station and that is capable of sending messages to said rescue base station to establish a rescue channel from said source base station to said mobile station through said rescue base station.

2. (Original) The apparatus as set forth in Claim 1 wherein said source base station is capable of sending an A7 handoff request message to said rescue base station to establish said rescue channel for said mobile station.

3. (Original) The apparatus as set forth in Claim 2 wherein said A7 handoff request message comprises an A7 handoff request message of a CDMA 2000 Air Interface Standard that has been modified to include a rescue channel indicator.

4. (Original) The apparatus as set forth in Claim 2 wherein, in response to receiving said A7 handoff request message from said source base station, said rescue base station is capable of sending an A3 connect message to said source base station to establish an A3 connection for said rescue channel.

5. (Original) The apparatus as set forth in Claim 4 wherein said A3 connect message comprises an A3 connect message of a CDMA 2000 Air Interface Standard that has been modified to include a rescue channel indicator.

6. (Original) The apparatus as set forth in Claim 4 wherein said source base station is capable of sending an A3 connect acknowledgment message to said rescue base station and said rescue base station is capable of sending an A7 handoff request acknowledgment message to said source base station.

7. (Original) The apparatus as set forth in Claim 6 wherein said source base station is capable of sending rescue channel information to said mobile station using an extended neighbor list update message.

8. (Original) The apparatus as set forth in Claim 7 wherein, in response to experiencing traffic disruption, said mobile station is capable of sending an extended pilot strength measurement message to said source base station to indicate that said rescue base station has been promoted to an active set of said mobile station.

9. (Original) The apparatus as claimed in Claim 8 wherein said source base station sends an A3 physical transition directive message to said rescue base station indicating that a rescue attempt is in progress.

10. (Original) The apparatus as set forth in Claim 9 wherein A3 physical transition directive message comprises an A3 physical transition directive message of a CDMA 2000 Air Interface Standard modified to include a rescue channel indicator.

11. (Original) The apparatus as set forth in Claim 8 wherein said source base station sends an A3 rescue channel activation message to said rescue base station indicating that a rescue attempt is in progress.

12. (Original) The apparatus as claimed in Claim 9 wherein, in response to receiving said A3 physical transition directive message, said rescue base station sends an A3 physical transition directive acknowledgment message to said source base station to confirm that said rescue attempt is in progress.

13. (Original) The apparatus as set forth in Claim 11 wherein, in response to receiving said A3 rescue channel activation message, said rescue base station sends an A3 rescue channel activation acknowledgment message to said source base station to confirm that said rescue attempt is in progress.

14. (Original) The apparatus as set forth in Claim 12 wherein:
said source base station sends forward traffic frames to said rescue base station;
said rescue base station sends idle reverse traffic frames to said source base station;
said rescue base station sends forward traffic frames to said mobile station;
said rescue base station receives reverse traffic frames from said base station; and
said rescue base station sends reverse traffic frames to said source base station.

15. (Original) The apparatus as set forth in Claim 13 wherein:

said source base station sends forward traffic frames to said rescue base station;
said rescue base station sends idle reverse traffic frames to said source base station;
said rescue base station sends forward traffic frames to said mobile station;
said rescue base station receives reverse traffic frames from said base station; and
said rescue base station sends reverse traffic frames to said source base station.

16. (Original) For use in a wireless communication system comprising at least two base stations and a mobile station, a method for providing rescue channel communications between said at least two base stations in said wireless communication system, said method comprising the steps of:

providing a rescue base station that is capable of communicating with said mobile station and that is capable of providing a rescue channel for said mobile station; and

providing a source base station that is capable of communicating with said mobile station and with said rescue base station; and

sending messages from said source base station to said rescue base station to establish a rescue channel from said source base station to said mobile station through said rescue base station.

17. (Original) The method as set forth in Claim 16 further comprising the step of:
sending an A7 handoff request message from said source base station to said rescue base station to establish said rescue channel for said mobile station.

18. (Original) The method as set forth in Claim 17 wherein said A7 handoff request message comprises an A7 handoff request message of a CDMA 2000 Air Interface Standard that has been modified to include a rescue channel indicator.

19. (Original) The method as set forth in Claim 17 further comprising the step of:
in response to receiving said A7 handoff request message from said source base station, sending an A3 connect message from said rescue base station to said source base station to establish an A3 connection for said rescue channel.

20. (Original) The method as set forth in Claim 19 wherein said A3 connect message comprises an A3 connect message of a CDMA 2000 Air Interface Standard that has been modified to include a rescue channel indicator.

21. (Original) The method as set forth in Claim 19 further comprising the steps of:
sending an A3 connect acknowledgment message from said source base station to said rescue base station; and
sending an A7 handoff request acknowledgment message from said rescue base station to said source base station.

22. (Original) The method as set forth in Claim 21 further comprising the step of:
sending rescue channel information from said source base station to said mobile station using an extended neighbor list update message.

23. (Original) The method as set forth in Claim 22 further comprising the steps of:
experiencing traffic disruption in said mobile station;
promoting said rescue base station to an active set of said mobile station; and
sending from said mobile station to said source base station an extended pilot strength measurement message to indicate that said rescue base station has been promoted to an active set of said mobile station.

24. (Original) The method as claimed in Claim 23 further comprising the steps of:
sending an A3 physical transition directive message from said source base station to said rescue base station indicating that a rescue attempt is in progress.

25. (Original) The method as set forth in Claim 24 wherein said A3 physical transition directive message comprises an A3 physical transition directive message of a CDMA 2000 Air Interface Standard modified to include a rescue channel indicator.

26. (Original) The method as set forth in Claim 23 further comprising in the step of:
sending an A3 rescue channel activation message from said source base station to said rescue base station indicating that a rescue attempt is in progress.

27. (Original) The method as claimed in Claim 24 further comprising the steps of:
receiving said A3 physical transition directive message in said rescue base station;
sending an A3 physical transition directive acknowledgment message from said rescue base station to said source base station to confirm that said rescue attempt is in progress.

28. (Original) The method as set forth in Claim 26 further comprising the steps of:
receiving said A3 rescue channel activation message in said rescue base station; and
sending an A3 rescue channel activation acknowledgment message from said base station to said source base station to confirm that said rescue attempt is in progress.

29. (Original) The method as set forth in Claim 27 further comprising the steps of:
sending forward traffic frames from said source base station to said rescue base station;
sending idle reverse traffic frames from said rescue base station to said source base
station;
sending forward traffic frames from said rescue base station to said mobile station;
receiving in said rescue base station reverse traffic frames from said base station; and
sending reverse traffic frames from said rescue base station to said source base station.

30. (Original) The method as set forth in Claim 28 further comprising the steps of:
sending forward traffic frames from said source base station to said rescue base station;
sending idle reverse traffic frames from said rescue base station to said source base
station;
sending forward traffic frames from said rescue base station to said mobile station;
receiving in said rescue base station reverse traffic frames from said base station; and
sending reverse traffic frames from said rescue base station to said source base station.